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UNITED NATIONS CONFERENCE
ON THE APPLICATION OF SCIENCE AND TECHNOLOGY
FOR THE BENEFIT OF THE LESS DEVELOPED AREAS

Agenda Item: H.2/H.3

Afghanistan

PLANNING MACHINERY IN AFGHANISTAN

By Abdullah YAFTALI, President,
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Papers have been contributed to the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas as working papers for that Conference. They are published as presented by the contributors, and the contents and the views expressed are those of the contributors. (See notes overleaf.)

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PLANNING MACHINERY IN AFGHANISTAN

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Department of Statistics & Research,
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ECONOMIC AND SOCIAL SETTING

1. Afghanistan is a landlocked country with an area of 650,000 sq. km., lying astride the Hindu Kush mountain range. The mountainous backbone of the country is surrounded by alluvial plains sloping away from the foot of the mountains. Its climate is dry with an average annual precipitation of 300 mm. The population of the country, which is predominantly rural, is presently estimated at 14 million, including two million nomads. Agriculture and animal husbandry together comprise the largest single occupation, accounting for about 80 per cent of total output and employment of the country. Although small and cottage industry holds a predominant position in the country's industrial economy, a few large manufacturing establishments have recently been established.

2. Official estimates of national income are not available; however, according to one unofficial estimate (purely of a tentative nature) per capita income is about Afs. 2,000.

3. Although Afghanistan is not faced with an explosive population problem, as a result of the extension of medical facilities of preventive and curative types, and improved living standards, population of the country is growing at a faster rate than before.

4. Foreign trade is very important to the country's economy; total external trade of the country in 1961-62 amounted to Afs. 4.4 billion. The principal exports are fresh and dry fruits, karakul skins, carpets, cotton and wool; the principal imports being consumer goods, particularly textiles, machinery and equipment.

ADVENT OF PLANNING

5. Economic development in Afghanistan actually started in the mid twenties, but conscious development dates back to 1929 when concerted attempts were made to open up communications, develop industry and introduce educational and social reforms. Subsequently, there was a proposal to draw up a seven-year program of development, but the Second World War forced the country to postpone development plans. At the end of the war, irrigation and power projects in the Helmand Valley were undertaken for the development of agriculture and industry. These efforts, however, were not integrated into a national plan. Rather this was limited development planning for one region.

6. Earlier attempts at development were deficient in yet another respect. There existed no clear-cut policy regarding the respective roles of private and public sectors. It was found that private enterprise had neither the experience nor the resources for undertaking large scale investment. Also, as has been the experience in other underdeveloped countries, its channels of investment did not always correspond to the genuine needs and requirements of the country. After taking into account all the issues involved, the Government decided upon a policy of 'guided economy' which was designed to utilise the potentialities of both public and private sectors and to divert private investment into the most advantageous channels. Elucidation of this basic policy is to be found in the following declaration by the Prime Minister in a speech delivered early in 1954:

> "My Government's economic policy is based on the principle that both Government and private enterprises should function for the benefit of the country and general welfare of the people. In the future the full economic resources of the country, private and public, willfunction in such a manner as to provide maximum benefit to all sections of the population. Therefore, for the coordination of the country's economic activities, it is necessary that the Government, which represents all sections of the population, guide and regulate such activities."

Subsequent planning has followed this basic policy.

THE FIRST FIVE YEAR PLAN

Objectives and Achievements

7. The First Five Year Plan, which commenced in September, 1956, and ended in September, 1961, is an important landmark in the annals of the country. It took a fairly comprehensive view of the economy and indicated the general framework for future development. Its primary objective was the development and exploitation of the country's natural resources, in order to bring about increased production and higher living standards.

8. The Plan accorded high priority to agricultural development. In order to meet the basic requirements of increased food production for a growing population and greater supplies of raw materials for domestic industry and for export abroad, the Plan provided for extension of arable area as well as for raising yields. In view of known statistical deficiencies, except in the case of cotton, karakul and wool, no production targets were laid down; but the potentialities for growth were duly taken into account.

9. The industrial program was intended to exploit the country's mineral and power resources as well as to expand consumer industry in order to raise living standards, save foreign exchange, and avoid inflation. Development of basic industry and the processing of domestic raw materials were the other highlights of the industrial program.

10. Great emphasis was laid on the development of transport and communications. Indeed, as a result of experience gained in the course of implementing the Plan, transport came to be accorded the highest priority. Road and air transport

alone being feasible for the country, the Plan provided for the construction of highways for opening up the economically important areas and for linking them with one another and with the borders. At the same time the transport fleet was to be enlarged, and a number of new automobile workshops were to be established to provide repair and service facilities. Civil aviation was to be developed to provide internal and external links.

11. The educational program was intended to broaden the general education base and extend facilities for technical and vocational instruction and training. Provision was also made for the improvement and expansion of higher education.

12. Suitable measures were also proposed for appropriate and parallel developments in other fields.

13. In the course of implementing the Plan, the country experienced shortages of internal financial and material resources and technical skills. There was also lack of sufficient experience in planning. However, despite these difficulties, the country succeeded in mobilising resources, will and energy of the people and taking effective steps for economic and social progress.

14. Despite changes and alterations which the Plan witnessed in the course of its implementation, it succeeded in achieving its major targets. Installed capacity of electric stations increased almost three times, and electric energy production almost five times; coal output 2.5 times.. Cement, woolens , artificial silk and vegetable oil were produced for the first time. Extensive prospecting for gas and oil was undertaken which resulted in the discovery of considerable deposits of gas. Construction of about 2,000 kms. of modern highways, with concrete and asphalt cover, was mostly completed.

15. Under agriculture, considerable work was done in the field of irrigation, and particular emphasis was given to plant and animal protection. Considerable progress was made in the case of social sciences, particularly education. The number of primary schools doubled; while enrollment of secondary and university education more than doubled. The number of medical personnal increased almost two times; the number of hospitals and beds, polyclinics and medical laboratories also recorded large increases.

Formulation, Programming and Financing

16. The formulation of the First Five Year Plan posed important issues of planning methodology and techniques. In the absence of data on population, national income, saving and investment, etc., it was obvious that techniques which were applicable to more developed environment could not possibly be used in Afghanistan. No effort was therefore made to determine the size of total investment on the basis of a given capital/output ratio, or input-output analysis. It was also not possible to indicate the desirable target of increase of national income and work out the size of the total investment program accordingly. The only approach feasible which suggested itself was to appraise the needs and requirements of the country in the economic and social fields and, in their light, lay down broad objectives and targets together with guidelines for individual departments. The method of partial planning according to which various government agencies formulate

their own programs and coordination is achieved through the national budget, was found more appropriate.

17. The procedure and processes of the formulation of the First Plan were as follows:

The Ministry of National Economy in cooperation with the Ministry of Finance and the Central Bank was instructed to make arrangements for preparing a comprehensive economic plan in accordance with the general policy statement already noted. A committee was formed comprising representatives of various Government agencies. Ministries and other operating agencies were asked to submit development proposals to the coordinating committee. The tax and customs duty schedules were revised, and changes were worked out with a view to increasing public revenue in such a way as to have the minimum of undesirable economic effects. On the basis of these revised schedules, estimates of public revenue over the five year period were made. After projecting ordinary budget expenditures, the amount available for development was indicated. Projections were also made of foreign trade and exchange earnings, as well as of aid promised or anticipated from external sources.

18. The means were then at hand for bringing the programs of the different agencies within the limits of anticipated financial resources. It was here that difficulties arose. Apart from statistical deficiencies already noted, there was the lack of personnel qualified to make engineering studies to determine costs and economic benefits of proposed projects. Much the same was true with respect to surveys of natural resources such as water, minerals, gas and oil. Such pre-investment studies are time consuming, and the Government felt a strong urge to get started with development.

19. During the first year of the Plan, the Ministry of Planning was created to give more emphasis and impetus to the making of plans and their implementation. The Prime Minister retained the portfolio of Minister of Planning. The Ministry became responsible for preparing the annual and quarterly development budgets in consultation with the other Ministries concerned and subject to final approval by the Cabinet and the Parliament.

20. During the first plan period there were various changes in the Plan. New grants and loans from friendly nations permitted some expansion. On the other hand, construction work on certain projects lagged behind schedule, and costs soared well above estimates. Experience with the first large irrigation project which was undertaken prior to the first plan period demonstrated that it takes a long time and heavy capital investment to reach the full agricultural potential of an irrigated area after storage dams have been constructed and canals have delivered water to each farm. If some of the land which was counted on to contribute toward the repayment of capital investment proves submarginal, then the remaining productive land has a larger burden to bear. In the light of this experience it was decided to postpone some of the projects which were not likely to give early results and, instead, to concentrate on works which promised early benefits.

21. In the light of experience gained, certain changes in the order of priorities became necessary. It was discovered that lack of a well developed transport system was holding up progress in other sectors too. It was, therefore, decided to

accord the highest priority to the construction of roads. Similarly, it was proved that the development of agriculture was in part dependent upon industry for equipment and supplies needed in production, as well as for the processing of agricultural products. Furthermore, it was realised that a balanced development of the economy was dependent upon exploitation of the basic energy resources, especially hydroelectric power, gas, oil and coal. The industrial sector was therefore given appropriate consideration.

22. In financial terms expenditures on development exceeded what was planned. The Plan envisaged a total outlay of 14 billion Afghanis; five billion under 'ordinary' and nine billion under 'development' budget. Actual expenditure during the plan period, however, amounted to 16.6 billion Afghanis, including 10.3 billion incurred on development. Of the latter sum about 6.7 billion was from foreign loans and grants. The internal revenue of the State, which amounted to 1.3 billion Afghanis on the eve of the Plan, rose to 2.3 billion Afghanis by the end of its fifth year.

23. To reduce the cost of the projects, the military conscript labor corps of the country was put to work on construction (which had the training aspect also in view). Simultaneously, as the base for further taxation was limited, greater use was made of the State Trading Organisation of the country, namely, Government Monopoly. The scope of business which the Monopoly had the authority to deal with was enlarged, as was also the margin between its buying and selling prices.

24. An interesting feature of the financing of the Plan was the import of consumer goods as part of foreign assistance. This measure had two purposes: to fight possible inflationary pressure and find additional Afghani resources for the Plan.

25. Public revenue from domestic sources exceeded projections, but ordinary budget expenditures also exceeded estimates by roughly the same amount, so that the volume of domestic financial resources channelled into investment by the Government closely approximated what had been originally planned. Although there was some price inflation during the first two years, this was successfully brought under control, and the free exchange rate for the currency was lower at the end of the period than at the beginning.

26. There were several problems in the field of budgeting during the course of the first five year Plan. The budget system in effect during the first two or three years of this period was deficient in several respects. There were no very clear definitions of expenditure objects or receipt sources, which made comparisons from one year to the next and from estimates to actuals very difficult. And the practice of requiring the prior approval of the Accounting Investigation Department led to considerable delays in budget execution, and hampered the progress of development projects particularly in outlying areas of the country.

27. The Budget and Accounting Act of 1338 (1959-60) was designed to remedy these and other defects then apparent. Nevertheless, the accounting and budgeting reforms did not eliminate all problems in this field. One of the recurring problems during the period of the First Five Year Plan which has not been entirely resolved even now - is the problem of integrating the planning process with the annual operating budget. There are several ambiguities about the coverage of the development plan in terms of governmental activities as contrasted with the coverage of the operating budget.

28. The failure to achieve complete integration of budgeting and planning has meant a serious lack of data respecting development projects. While the development activities are planned on a project-by-project basis, and the Ministry of Planning tries to follow the execution of the plan on a project-by-project basis, annual appropriations to the agencies and the agencies' own records of expenditures are maintained according to objects of expenditure rather than projects or program. We are now examining the possibility of shifting over the development budget to a project-by-project basis rather than an objects of expenditure basis.

29. The importance of manpower planning came to be realised in the course of implementation of the Plan. It became apparent that the educational plan should be reoriented and, apart from expansion, should integrate the different programs and correlate them with the manpower requirements of the Plan as a whole and its component projects. In order to satisfy the growing requirement of personnel to the extent possible, on-the-job training was introduced.

THE SECOND FIVE YEAR PLAN

30. The Second Five Year Plan which began in March, 1962, has the following main objectives:

(a) Raising agricultural productivity with a view to procuring ample food supply for the country's growing population and providing adequate raw materials for industry and for export abroad. (In this connection the Plan lays particular emphasis on increasing the production of cotton).

(b) Establishment of basic industry (e.g., petroleum, gas, chemicals, and metallurgy) and expansion of consumer industry and power.

(c) Expansion of social services, particularly education (emphasis is laid on the training of personnel).

The plan is also expected to further strengthen the country's economic infrastructure, particularly transport. In this connection it envisages the completion of the network of roads and communications started during the First Plan, by the middle of its third year.

31. By the time deliberations on the Second Five Year Plan started certain improvements had taken place in the compilation of statistical data. Some data was now available on money and banking, prices, foreign trade and balance of payments, production of large industrial establishments and factory employment. Also, the Ministry of Planning was now in a better position to coordinate planning. While the Ministries were still responsible for the drawing up of their respective plans, the Ministry of Planning cooperated with them by deputing its own experts for assisting them in their deliberations. The Ministry also suggested broad guidelines for the preparation of the Plan. These related to objectives, prerequisites and priorities. Creation of employment opportunities was a notable feature of the suggested objectives. Highest priority was to be given to projects carried over from the First Plan while projects which would result in the earning or saving of foreign exchange or which, on balance, were more productive, were also given special consideration. The task of coordinating the sectoral plans fell to the Ministry of Planning.

MACHINERY FOR PLANNING

32. The character of planning machinery in Afghanistan is determined by its unitary form of government. The Ministry of Planning is charged with the responsibility of coordinating, reviewing, and modifying the different sectoral plans of development; determining priorities; and advising government departments in all matters pertaining to economic development.

33. The Ministry is headed by a Minister (since its very inception the Prime Minister has held this portfolio) and assisted by a Deputy Minister. It comprises four main departments - Planning, Research and Statistics, Foreign Liaison and Administration. Departments of Planning and Research and Statistics have each a President. The Planning Department is the coordinating unit, comprising sections of coordination, manpower, agriculture, mining and industry (including power), trade and commerce and money and banking. The main duties of the Research and Statistics Department are the compilation of development statistics and initiation of research studies on different aspects of the economy. The Department comprises units dealing with statistics, research and publication. One of the important contributions of this Department is the annual Surveys of Progress which detail the achievements of planning in different sectors and contain useful statistical data of the economy of the country. The Foreign Liaison Department is responsible for coordination of all activities relating to foreign economic and technical assistance received by the country.

34. The Ministry of Planning is essentially a staff agency, its functions being advisory and coordinating rather than executive. As a result it is able to devote its entire energy and attention to problems of development and assess them with detachment and a perspective broader than that of an administrative and executive agency. The Ministry also performs certain supervisory functions in regard to implementation. Its key position in the planning of the country cannot possibly be over-emphasized.

35. The Planning Ministry is assisted by a number of foreign, including U.N., experts. However, it is seriously understaffed, particularly for the duties and responsibilities that it has been assigned. Apart from an absolute shortage of staff in all its existing departments and units, it has no experts of its own specialising in the various physical sciences. Consequently, it has to lean rather heavily on engineers attached to the administrative Ministries and on their technical advice.

36. Yet another handicap which the Ministry suffers from is the absence of a proper evaluation machinery either as an independent body or as a department of its own. It has to depend on reports of the Ministries on the state of progress of the Plan. A convention has been established that quarterly sanctions of development expenditure will issue only with the consent of the Ministry of Planning on the basis of quarterly reports of progress of a Ministry. Sometimes these reports are not submitted in time or are not informative enough, rendering the task of the Ministry very difficult.

37. With the advent of planning practically all the Ministries dealing with development have come to establish planning units of their own. These units usually coordinate the programs of different departments of a Ministry. The Ministry of Planning keeps a close liaison with these units.

38. Frequent references have been made in this paper to the handicaps arising from lack of reliable information. Progress is being made through the efforts of the various Ministries, many of which have established statistics and research departments. The Ministry of Commerce, for example, has made rapid progress in improving the accuracy of recording foreign trade statistics, including both quantities and values. The publication of such figures has been greatly accelerated. Similarly the Central Bank has been improving statistics on the money supply, balance of payments, public debt position and related subjects. The Manpower Division of the Ministry of Planning has been collecting useful data on manpower and employment. Other similar examples could be cited for other Ministries.

39. The Ministry of Planning has a coordinating function with respect to information relevant to planning. It prepares various types of forms for the use of the other Ministries. For example, in submitting development project proposals there are forms which cover not only costs, time schedules and expected results of the projects, but also their requirements for materials, labor of various categories and power. This is intended to permit an evaluation of requirements for these project inputs in relation to the overall supply. Other forms provide for reporting progress in construction and in the use of inputs as well as expenditures. This is intended to provide a basis for evaluation of progress and for making adjustments where necessary.

FOREIGN ASSISTANCE

40. With its existing low levels of income and consumption, it is not possible for Afghanistan to mobilise internal savings on a scale adequate for sustained economic development. The country has therefore to rely on external savings to undertake large-scale investment in the public and private sectors. Apart from inadequacy of internal savings, due to the present shortages of materials, techniques and skills, development in Afghanistan involves a higher proportion of foreign exchange. Foreign assistance is needed not only to import capital goods, but also to supply the balance of foreign currency requirements which cannot be met by the export earnings.

41. As in the past, Afghanistan will welcome all aids - economic as well as technical — from friendly countries and from international organizations such as the United Nations and the World Bank. To be effective, such assistance has to be coordinated with the national plans of development particularly in respect to its magnitude, certainty of availability, and timeliness. A large part of investment in Afghanistan in the coming years will have to be devoted to infrastructure, which is not only capital-intensive but also does not bring any direct dividends, at least in the short run.

42. The Ministry of Planning in cooperation with the Ministry of Finance coordinates work relating to foreign assistance. Priorities are determined in the light of the objectives of the Plan and the urgency and profitability of individual projects. This applies to both economic and technical assistance. It has been the experience so far that a good bit of the utility of assistance received is lost due to protracted negotiations and short-term nature of assistance received.

43. To conclude, five years is too short a period to accomplish all the tasks of a national development, or to perfect the techniques of programming and implementation. A realistic evaluation of the efforts made during the First Plan will show that despite many handicaps, certain essential prerequisites have been created for future progress. So far as techniques of planning are concerned, the authorities are conscious of the shortcomings and intend to profit from the experience of the more developed countries. It is hoped that the forthcoming deliberations will help developing countries to increase their understanding of planning processes.

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C O R R I G E N D U M

Agenda Item H.2/H.3 should read :

H.2

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SUMMARY
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ON THE APPLICATION OF SCIENCE AND TECHNOLOGY
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SUMMARY

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PLANNING MACHINERY IN AFGHANISTAN

SUMMARY

Mr. Abdullah Yaftali,
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Royal Government of Afghanistan

Economic development in Afghanistan started in the mid twenties, but planning in its fuller sense came a little later. The FirstFive Year Plan of the country started in September, 1956, and ended in 1961. The Second Five Year Plan commenced in March, 1962.

Planning in Afghanistan is founded on the principle of 'guided economy' which aims at exploiting the resources of both private and public sectors for the good of the country. As the resources and experience of private enterprise were found far too inadequate for a large scale effort, the State had to intervene in order to give the necessary push to the economy. Most of the investment has so far been devoted to the infrastructure: mainly transport, power and irrigation. Investment in human capital was also necessary in view of the narrow base of education and acute lack of technical knowledge and skills.

Due to statistical deficiencies of a major character, usual projections of economic growth are inappropriate. Only a partial, qualitative approach, based on a given set of broad objectives and priorities has been feasible. The two Plans appraised the general needs and requirements, and in the light of known potentialities determined broad objectives and 'targets' in diverse fields.

Some of the major difficulties experienced, apart from dearth of statistical data, have been scarcity of domestic financial and material resources and trained and skilled manpower. Despite an impressive increase of government revenues, income fell short of requirements. In addition, attempts were made to increase non-tax revenue by widening the scope of State trading (Government Monopoly). Simultaneously, efforts were also made to reduce construction costs.

The country needs, for some time to come, foreign economic and technical assistance. With the low level of incomes, savings are not sufficient to finance a rapid rate of growth. Production cannot be increased fast enough to meet expanding domestic requirements and at the same time increase exports enough to finance all of the needed capital equipment and technical services.

The Ministry of Planning is the pivot of the planning organization of the country. It is the chief coordinating and supervisory agency, but its functions are more advisory than executive. Along with the Ministry of Planning, the Ministry of

Finance has a vital role to play. These two Ministries must work together closely in the integration of budgeting and planning. Practically all the Ministries and Government departments now have planning units.

Achievements have been impressive in the field of electric power, coal, cement, transportation and education. There has been substantial expansion of textiles and a few other consumer industries. Large deposits of gas have been discovered which will be exploited during the current Plan.

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CONFÉRENCE DES NATIONS UNIES
SUR L'APPLICATION DE LA SCIENCE ET DE LA TECHNIQUE
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Point de l'ordre du jour : H.1

France

LES UTILISATIONS DE L'ENQUETE STATISTIQUE DANS L'EVALUATION DE LA PRODUCTION AGRICOLE EN MILIEU AFRICAIN

Par M. P. SOUBIE,
Administrateur de l'Institut National
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Les mémoires rédigés à l'intention de la Conférence des Nations Unies sur l'application de la science et de la technique dans l'intérêt des régions peu développées sont des documents de travail. Ils sont publiés tels qu'ils ont été présentés et les assertions et opinions qu'ils contiennent sont celles de leurs auteurs.

NOTES

1. Les mémoires choisis pour être présentés en séance générale pourront être obtenus à la Conférence dans les langues officielles suivantes des Nations Unies: anglais, espagnol, français et russe.

2. Les mémoires choisis pour être présentés en séance spéciale pourront être obtenus à la Conférence dans l'une seulement de ces langues officielles.

3. Les résumés qui ont été rédigés pour tous les mémoires par les auteurs de ceux-ci pourront être obtenus à la Conférence dans les langues officielles suivantes des Nations Unies: anglais, espagnol, français et russe.

4. Préalablement à la Conférence, les mémoires et les résumés ne feront pas l'objet d'une distribution générale mais d'un tirage restreint destiné aux délégations des gouvernements et autres participants officiels. La publication et la distribution générale des actes de la Conférence s'effectueront conformément aux règles et pratiques agréées par le Comité des publications des Nations Unies.

Les utilisations de l'enquête statistique dans l'évaluation de la Production agricole en milieu africain

par M. P. SOUBIE
Administrateur de l'Institut National de Statistique et des Etudes Economiques

-:-:-

1.- GENERALITES

1-1 Les ressources en pays africains

L'ensemble des ressources d'un pays peut être divisé en trois catégories :

- les importations (au sens le plus large)
- la production locale
- les marges brutes (de commerce, de transport, de transit).

Laproduction locale représente en moyenne 60 % environ de cet ensemble en valeur monétaire.

1-2 Importance de la production agricole

La production agricole est une partie de la production locale. Suivant les pays, on estime qu'elle représente de 20 à 50 % de celle-ci, c'est-à-dire 12 à 30 % seulement des ressources totales exprimées en valeur monétaire.

Cela peut paraître faible, mais en pays africain, importations et marges de distribution correspondent à un volume monétaire important. D'autre part, les données ci-dessus ne sont que des évaluations globales, certainement meilleures -en ce qui concerne les importations et les marges- que l'auto-consommation par exemple (peut-être sous estimée).

Si, en tous cas, la production agricole apparait en valeur relativement secondaire, elle est en fait l'activité de base de tous les pays dans lesquels près de 50 % de la population travaille dans l'agriculture -pour 30 à 35 % d'inactifs et à peine 15 % de travailleurs dans d'autres activités-.

2.- PRODUCTION AGRICOLE - Concepts, Utilisation

2-1 La production dans le bilan national

La production dans le bilan national : les quelques données numériques précédentes ont été estimées à partir de travaux de comptabilité nationale. Elles n'ont pas fait l'objet d'évaluations statistiques directes.

Les spécialistes des comptes économiques sont du reste préoccupés par les valeurs incertaines de certains agrégats fondamentaux de leurs bilans nationaux.

La production agricole est, en Afrique, un d'entre eux qui a fait jusqu'ici l'objet de nombreuses demandes aux statisticiens.

Avant d'envisager les possibilités actuelles d'évaluation, il est nécessaire de préciser quelques définitions.

2-2 Production commercialisée et production autoconsommée

Les produits de la terre, de la cour et de l'élevage de l'ensemble des exploitations d'un pays sont d'usage divers :

1) Ils sont consommés sur place dans l'exploitation
2) Ils sont vendus ou troqués.

Les produits qui font l'objet de trocs ou de ventes "libres" sont surtout les produits vivriers, base de l'alimentation africaine, ainsi que les volailles et les produits de la cour.

Les cultures industrielles (arachide, café, cacao, tabac, cola) sont presque entièrement commercialisées. Ce type de commerce, souvent destiné à l'exportation, fait l'objet de la sollicitude des organismes économiques (tels que Caisses de Stabilisation) afin, par exemple, de garantir des prix aux producteurs. Il est donc plus facile à saisir que le précédent.

La production autoconsommée et la commercialisation des produits vivriers, au contraire, échappent totalement à ce qui n'est pas une enquête appropriée.

2-3 Production potentielle et production extraite

Si la notion d'autoconsommation en matière de produits agricoles ou alimentaires est courante, la notion de production potentielle a dû être introduite en Afrique.

Il arrive fréquemment que le paysan africain laisse en terre une partie de la récolte de ses champs. Ceci se produit notamment si l'exploitant estime ses besoins satisfaits, ou n'est pas certain de vendre ce qui reste.

Ainsi, la récolte a donné une certaine quantité de manioc consommable : c'est la production potentielle.

L'exploitant n'en récoltera que 80 % par exemple pour ses besoins et pour ses ventes. Ces 80 % représenteront la production extraite.

La production potentielle est liée aux surfaces cultivées et aux rendements.

La production extraite est liée à la commercialisation et à l'autoconsommation.

3.- LES METHODES D'APPROCHE

3-1 Le commerce extérieur

Avant d'aborder des enquêtes directes, on peut observer les statistiques d'exportation, enregistrer les valeurs globales des produits agricoles destinés à l'étranger.

Ceci est une première approche. Les données disponibles valent ce que valent les statistiques douanières. Elles sont souvent insuffisantes, encore actuellement. Néanmoins, elles permettent de se faire une idée assez précise de la production des cultures industrielles exportées sous contrôle douanier.

Malheureusement, une part non négligeable de la production commercialisée, portant surtout sur les cultures industrielles, franchit les frontières sans contrôle.

Les postes frontaliers sont encore relativement rares en pays africain.

Un grand nombre d'échanges commerciaux, d'un pays africain à l'autre, ne se fait pas par des points de passage obligés. Il y a, tant à l'entrée qu'à la sortie, un phénomène pratiquement incontrôlable actuellement et qui ne peut être approché par les séries du commerce extérieur tant que ce dernier n'enregistrera pas les échanges intérieurs entre pays.

Il s'agirait donc :

- de créer des postes douaniers plus nombreux
- de favoriser un développement plus standardisé du commerce inter-Etats afin que l'intensification des transports oblige à emprunter des points de transport contrôlés
- d'obtenir enfin des nouveaux postes douaniers un enregistrement systématique aussi précis que possible (comme on a eu du mal à le faire dans les ports et les aérodromes).

3-2 Les enregistrements permanents

Il peut venir à l'esprit de confier à chaque responsable des circonscriptions agricoles, une enquête annuelle auprès des exploitants afin de déterminer, avec une approximation suffisante, la production de la ou des récoltes importantes.

Faute de données statistiques précises, et compte tenu de cas connus, où les évaluations personnelles de chefs de Services agricoles manquant de moyens d'enquête se sont avérés fort éloignés de résultats obtenus après des mesures précises, cette investigation annuelle peut permettre de fixer un ordre de grandeur.

Ce serait bien entendu, une évaluation sur échantillon qui se rapproche des procédés d'enquête que nous verrons plus loin. Mais elle serait plus rapide puisque les résultats seraient obtenus par réponse directe des exploitants et, de toute manière, meilleure que rien du tout.

Néanmoins, le procédé est dangereux, étant donné :

- les infidélités de mémoire des exploitants (il serait en effet difficile de passer assez rapidement après la récolte partout),
- les nombreux double-emplois dans certaines régions ou la notion d'exploitation n'est pas toujours très précise. Il s'agit de champs, prêtés ou loués dans des conditions de partage parfois complexes, ou de terres de concessions auxquelles il serait délicat d'affecter un producteur, ces deux causes étant incompatibles avec une rapidité (nécessaire) du travail.

3-3 Evaluations diverses

Cet alinéa, placé dans une énumération d'approche possible des données concernant la production agricole, nous permettra de rappeler les données issues des agrégats des comptes économiques.

On citera également les données enregistrées par des Organismes tel Marketing Board qui contrôlent ou se chargent des achats aux producteurs (Ghana par exemple).

Une autre possibilité est l'étude des déclarations d'achats et de stocks effectués par les commerçants qui nécessite, pour éviter fantaisies et doubles comptes, une discipline assez stricte (Congo-Léopoldville et Cameroun).

Enfin, on peut suivre les apports sur les marchés. La méthode est théoriquement bonne, pratiquement délicate à réaliser complètement. Si les marchés locaux sont assez bien connus, ils ne sont pas l'unique siège d'échanges. Il faudrait, d'autre part, les voir tous.

3-4 Les enquêtes

Les méthodes précédentes avaient leurs avantages. Elles peuvent donner rapidement des résultats et, en l'absence de tous renseignements, elles représentent tout de même quelque chose.

On peut leur faire deux reproches importants :

- elles ne sont pas objectives car la production (quantité recherchée) n'est jamais directement étudiée.
- elles peuvent occasionner de nombreux double comptes, parfois plus dangereux que les omissions.

On est donc conduit, à un moment ou à un autre, à rechercher quelques certitudes de base, quelques points de départ objectifs et relativement valables.

Il n'y a pas pour cela, d'autres moyens que l'enquête directe, et en particulier, celle qui remonte "à la source" : l'enquête agricole.

3-4-1 Les enquêtes agricoles

Elles ont été préconisées par la F.A.O. dès avant 1950, comme point de départ nécessaire de toute documentation chiffrée.

La forme conseillée était celle d'un recensement par sondage. Les unités à étudier étaient les exploitations agricoles.

L'enquête devait porter sur un échantillon d'exploitation représentant une certaine fraction de l'ensemble.

Les quantités recherchées, mesurées directement sur chacune des exploitations de l'échantillon, et rassemblées, permettaient grâce à la méthode des sondages statistiques, d'estimer leur valeur globale à l'échelle de l'ensemble du domaine.

Les méthodes de sondage, les questionnaires à utiliser, les contacts à prendre, les difficultés imprévisibles, ont été testés sur une première série d'enquêtes régionales restreintes dans les pays africains de langue française.

A partir de 1960 avait été lancée une série de recensements agricoles à l'échelon national (Sénégal, Niger, Mali, Dahomey, Gabon, Congo, R.C.A., Tchad, Haute Volta); la Côte d'Ivoire et le Cameroun adoptèrent des enquêtes progressives par régions.

L'expérience a montré que pour avoir des résultats valables il fallait se limiter.

On a dû, notamment pour le recensement mondial, adopter des priorités. Elles ont notamment porté sur les données suivantes : superficies plantées, population agricole et activité, modes de faire valoir, cheptel, outillage, baptisées "de structure" en raison de leurs faibles variations relatives d'une année à l'autre par opposition aux données "courantes" variables suivant la récolte par exemple, telles que densité, rendement ...

En raison des observations faites au chapitre 3-1, les productions ne figurent pas sous la forme de questions directes.

Elles ne peuvent être déduites des relevés objectifs qu'en exprimant la production d'une culture donnée comme produit des superficies qu'elle occupe par son rendement moyen : $P = S \times r_m$

Pour obtenir les deux quantités nécessaires à ce calcul, on se heurte à des difficultés sur lesquelles il convient d'insister.

Dans la plupart des pays africains, plus de la moitié des superficies cultivées sont constituées de parcelles (ou champs) sur lesquelles l'exploitant cultive plusieurs cultures. De plus, les cultures sont semées quasi au hasard et les pieds des différents plants présents sur la parcelle sont étroitement mêlés en général.

On peut donc, de visu, s'assurer qu'une parcelle déterminée porte, par exemple, du maïs, de l'arachide et du manioc, mais on en sera réduit, lors des totalisations, à comptabiliser les surfaces portant l'association "maïs-arachide-manioc".

En outre, plus d'une plante se retrouve dans des associations différentes (le maïs, associé plus haut à l'arachide et au manioc) se retrouvera ailleurs associé au bananier et au tarot.

Le résultat est que :

- on ne peut directement affecter une surface partielle à chaque culture d'association (en fait, sur le terrain, chaque plante occupe toute la surface de l'association, mais est en principe plantée plus espacée que si elle était seule),
- par voie de conséquence, il paraît extrêmement difficile d'en déduire la superficie totale plantée pour une culture déterminée.

A ce stade du problème, il existe deux solutions :

- ou bien on tente cette affectation de surface fictive à chaque plante (par exemple en utilisant la réduction relative de densité lorsqu'on passe de la culture plantée seule à la culture en association). On fera des mesures de rendement par échantillonnage sur les parcelles de culture pure et on pourra appliquer la formule.
- ou bien, on conserve les surfaces mesurées et on leur applique le rendement mesuré correspondant.

De ces deux solutions, la seconde apparaît meilleure.

Si, en effet, pour chaque parcelle de l'échantillon on peut mesurer
- la surface
- le rendement de chaque culture présente, la production de la culture sur la parcelle (P_c) devient la variable aléatoire à redresser. La production est donc l'objet d'une évaluation directe et objective et est extrapolée à l'ensemble du domaine comme les autres variables.

En réalité, bien que plus séduisante et plus précise, cette méthode est délicate car elle suppose des mesures de rendement sur toutes les parcelles de l'échantillon.

Or, si la mesure des densités (nombre de plants ou de pieds à l'are) peut être faite au cours d'un passage d'enquêteurs en même temps que les autres relevés "de structure" celle des rendements exige d'être réalisée pendant la période de la récolte (sinon il faut demander aux exploitants de "garder la récolte" et très très souvent la lui acheter).

Un certain nombre de parcelles de l'échantillon échapperont donc fréquemment à cette mesure.

Dans une optique de seules mesures de rendement -c'est-à-dire recherche de rendements "moyens" d'une culture à l'échelle d'un pays ou d'une strate- on peut remplacer les parcelles manquantes par d'autres (même n'appartenant pas à l'échantillon "structure") de façon à avoir un échantillon du même ordre de grandeur.

Mais, dans la solution préconisée, il est nécessaire que ce soit les parcelles dont on a mesuré la surface qui fassent l'objet d'étude de rendement.

Par conséquent, les difficultés pratiques conduisent souvent à revenir à la première solution.

En supposant des rendements moyens en cultures pures, on tente d'affecter à chaque culture une partie de la surface totale plantée.

Si A et B sont deux cultures figurant sur la même superficie s , on écrira :

$$\frac{s_A}{\frac{\delta_{A'}}{\delta_A}} = \frac{s_B}{\frac{\delta'_B}{\delta_B}} = \frac{s}{\frac{\delta'_A}{\delta_A}\frac{\delta'_B}{\delta_B}}$$

A et B représentant les surfaces fictives cherchées, 'A et 'B les densités de A et B en association, A et B les densités de A et B pures.

Mais l'application de ce calcul présente deux gros défauts :
1/ Une incertitude théorique concernant l'hypothèse (proportionnalité de la surface fictive à la réduction relative de densité)
2/ une grande difficulté pratique à déterminer les quantités telles que : $\frac{\delta_{A'}}{\delta_A}$

En effet : a) la détermination des A sur un échantillon de parcelle différent de celui qui sert à estimer les superficies, ne serait pas très correcte car il n'est pas exclu qu'il existe des liaisons locales entre la densité à l'unité de surface et la superficie plantée elle-même, certaines conditions favorisant telle culture et faisant ainsi qu'elle est à la fois plus cultivée en général (donc occupe une surface plus étendue) et plus dense parce que culture principale.

b) le problème se complique pour les densités en association où, aux observations précédentes (a) se superpose le fait que d'un type d'association à l'autre, la densité moyenne d'une culture donnée est très vraisemblablement différente. Il y aurait par conséquent, en supposant (a) résolu, autant de réductions relatives que d'associations rencontrées par culture donnée.

Enfin, si on suppose réglée la question du partage fictif des superficies, il est indispensable d'observer que la détermination d'un rendement moyen en culture pure se heurte aux mêmes difficultés théoriques que celle des densités.

En fait, les difficultés rencontrées dans les réalisations du premier recensement agricole dans les pays africains de langue française n'ont pas permis d'adopter, sous leur meilleure forme, ces deux méthodes. On a dû avoir recours à l'une et à l'autre. En effet, si l'on n'a pu réaliser entièrement la première méthode (les rendements et les densités dans toutes les parcelles mêmes de l'échantillon), on a cependant conservé l'enregistrement des surfaces sous la forme directe des relevés, c'est-à-dire par culture (en pure et en association), en séparant chacune d'entre elles.

Une culture donnée s'est vue affecter la superficie où elle était présente (pure d'une part, toutes associations où on la rencontrait d'autre part), et on a sur l'ensemble des parcelles - pures
- en association,
calculé leur rendement moyen distinct pour la culture.

Les imperfections de ce système découlent des observations précédentes. Mais ce sont de premiers résultats. En principe donc, ce type d'enquête réalisé à l'échelon national, peut seul faire directement une évaluation de la production.

D'autres enquêtes par sondage, comme les évaluations déjà envisagées, peuvent également conduire à des approches indirectes, ce sont :

3-4-2 Les enquêtes de consommation

Il s'agit là d'évaluer la consommation des ménages. Le principe d'enquête est le même que pour les enquêtes agricoles, en gros : sondage à deux degrés, l'unité statistique étant ce que l'on désigne ici par groupe élémentaire de consommation (GEC) qui n'est pas nécessairement le ménage, d'où son nom.

Nous n'insisterons pas sur les problèmes de réalisation pratique qui ont cependant demandé une longue expérience, d'ailleurs perfectible; nous en indiquerons brièvement avantages et défauts.

Avantages : ici encore l'observation est objective. Les menus consommés sont pesés matin et soir par les enquêteurs (les enquêtes par carnet de ménage étant impraticables par suite de l'étendue de l'analphabétisme).

Défauts : - ceux qui résultent de cette objectivité : obligation de passage court (une semaine au plus)
- longueur des relevés
- influence des variations saisonnières (notamment en milieu rural).

Ces deux derniers obligent à prendre des échantillons de tailles souvent rrop limitées et à les scinder en sous-échantillons saisonniers dont la signification est fréquemment très faible.

En principe, une enquête de consommation pourrait paraître rendre compte de la consommation totale d'un domaine (régional ou national).

En fait, outre les impératifs déjà cités (souvent insurmontables, on ne dispose pas de crédits très importants qui permettraient d'agrandir les échantillons) il y a la question très importante des stocks (familiaux et autres) extrêmement difficiles à évaluer sur une période, qui représente un handicap sérieux -plus encore sans doute que ceux qu'on a pu rencontrer lors des enquêtes agricoles-.

Il ne s'agit d'ailleurs là, en mettant les choses au mieux, que de la production extraite; mais dans une optique de développement et notamment de déséquilibre inter-régional, la production potentielle revêt une grande importance.

3-4-3 Les enquêtes flux de transport

Elles peuvent constituer une approche de la partie commercialisée de la production.

Il s'agit en effet, soit par une enquête par sondage sur des véhicules (extrait du fichier des cartes grises par exemple), soit par comptages routiers (postes convenablement situés sur les voies principales de transports routiers) d'évaluer la quantité de marchandises transportées dues à la production agricole.

Cette méthode, intéressante du point de vue fréquentation routière et intensité des échanges ne porte que sur une assez faible fraction de la production agricole.

D'autre part, la coupure entre le producteur et le transporteur ne permet pas toujours de déterminer si certains produits sont de la dernière récolte ou résultent de stockages.

3-5 Essai de synthèse

Comme on l'a dit, seule l'enquête sur l'agriculture peut permettre, compte tenu des moyens à mettre en oeuvre pour employer une méthode valable, une évaluation directe.

Dans toute autre hypothèse, il est nécessaire de recouper :

- commerce extérieur, enquêtes flux de transports et statistiques ferroviaires sur les échanges interterritoriaux afin d'évaleur le volume et la valeur des produits agricoles exportés.

Il sera difficile d'éviter les doubles comptes et la question des stocks reste posée.

On ne saisira là qu'une partie de la production commercialisée (en ce qui concerne le commerce extérieur : cultures surtout industrielles).

On pourra compléter par des enquêtes sur les marchés locaux (production traditionnelle et essentiellement vivrière) ainsi que sur l'autoconsommation (très importante en milieu agricole africain).

Cet ensemble peut fournir une évaluation certes approximative mais théoriquement soutenable.

Néanmoins l'obligation de réaliser une enquête sur l'autoconsommation tendra plutôt à préconiser les complémentarités ci-contre :

- enquêtes sur la consommation (résultats d'achats, de stocks ou d'autre production)

- évaluation de la production exportée (statistiques du Commerce Extérieur existantes plus échanges interterritoriaux plus statistiques ferroviaires inter-états), qui n'aura quelque chance de convaincre que dans l'hypothèse d'enquêtes annexes sur les stocks familiaux avec l'enquête de consommation autre que recherche directe.

4.- LES POSSIBILITES ACTUELLES EN PAYS AFRICAIN

Dans le domaine statistique, on dispose de deux sortes de données :

a) les données dites "courantes" qui se limitent aux statistiques du commerce extérieur pour ce qui nous occupe,

b) les enquêtes

a) dans un certain nombre de pays, l'appareil statistique est encore embryonnaire, d'autre part la statistique du Commerce Extérieur a été à grand peine extraite de l'optique "fédérale" qui était la leur il y a quelques années.

Enfin les lacunes sont encore très grandes et, mêmes excellentes, les statistiques disponibles seraient encore insuffisantes. La question est évoquée plus haut.

Néanmoins, il est au premier chef nécessaire d'entreprendre dès à présent une amélioration générale de celles-ci basée sur une réglementation sévère et une extension des moyens de contrôle.

b) Les enquêtes apparaissent donc nécessaires. Mais elles sont lourdes et délicates et l'on peut dire qu'une condition essentielle de leur valeur réside dans les mesures qu'on y apporte (en personnel et surtout en crédits).

Or c'est là une tâche ingrate, longue, qui conduit à s'assurer 5 à 6 données fondamentales (mais 5 ou 6 seulement).

Il y a là un choix à faire dans l'immédiat : faut-il investir des crédits importants dans des enquêtes par sondage à technique approfondie, ou réserver les crédits pour l'"action" se contentant de larges approximations.

Actuellement, on est encore à la période des "structures" dans bien des domaines. Il semble donc nécessaire de se munir de données valables dès le départ en se limitant aux priorités. Mais pour limiter le lourd investissement que cela représente, il faut savoir étaler ces études.

5.- CONCLUSION

Tous les pays africains désirent disposer au plus vite d'un plan.

Un plan suppose la connaissance d'un certain nombre de données actuelles fondamentales.

Dans le domaine agricole, les superficies sont assez bien connues. On aura quelques idées précises sur les densités moyennes des cultures.

Dans l'impossibilité de répéter chaque année (en les améliorant compte tenu des observations précédentes) les enquêtes agricoles et en supposant les superficies relativement stables pour une période de 5 ans, on peut tenter des estimations de production à l'aide de mesures annuelles de rendement. On sera ainsi conduit à reprendre soit la deuxième méthode d'estimation, soit celle qui a été adoptée jusqu'ici

Dans le premier cas, il s'agira d'effectuer des mesures de rendement moyen en seules cultures pures et, si possible, par zones. C'est là un travail qui peut être réalisé par les responsables régionaux de l'agriculture si on leur donne les moyens, et c'est possible.

Dans le second, pour les mêmes organismes (qui sont les plus qualifiés d'ailleurs pour exécuter ce travail) la tâche serait plus facile : mesures en pures et associations (en essayant de dégager des constantes suivant les associations).

Il semble que ce soit là le meilleur moyen de s'assurer de la production agricole, compte tenu des nombreux omissions et doubles emplois qui peuvent se glisser dans les combinaisons diverses d'évaluations : lacunes aggravées par les imperfections mêmes de ces enquêtes.

Dans le proche avenir, la première opération après le recensement 1960-1961 serait d'implanter ces "laboratoires itinérants" de mesures. Là encore cependant, l'ordre de grandeur de l'investissement peut faire reculer. De toute façon, et surtout, il faudra du temps.

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SUMMARY

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USES OF STATISTICAL SURVEYS IN THE EVALUATION OF AGRICULTURAL PRODUCTION IN AFRICA

By M. P. SOUBIE,
Director of the National
Statistical and Economic
Survey Institute

Papers have been contributed to the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas as working papers for that Conference. They are published as presented by the contributors, and the contents and the views expressed are those of the contributors. (See notes overleaf.)

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No.1279 USES OF STATISTICAL SURVEYS IN THE EVALUATION OF AGRICULTURAL PRODUCTION IN AFRICA

H.1.(P.3)

By
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SUMMARY.

Estimation of agricultural production in Africa is one of the most essential requirements of the plan.

Until now the only available data for African countries have been derived from very rough estimates based on the development of exports, on a few market studies and on the opinions, which are frequently subjective, of heads of Departments.

The necessity of obtaining valid information has led statisticians to try out as far back as 1954 the methods which were used for conducting the world agricultural survey of 1960.

Concerning structural data (obtained in seven African countries), this survey has led to satisfactory results.

On the other hand, developmental data, such as output, and hence, production, have turned out to be very hard to analyse.

A study of the problem makes clear the difficulties which this subject may be expected still to present in future.

It seems desirable, therefore, taking into account the present situation:

1. To accept as valid, for a few years, the structural data obtained by the world survey.

2. To set up at once in the agricultural sectors, "laboratories" (not necessarily very elaborate) for measuring output

   of single crops
   of combined crops (indicating, if possible, the various combinations).

3. To plan a programme of studies capable of cross checking (or possibly mitigating) the inadequate results obtained by direct agricultural experiment.

These studies would consist of:

(a) regional surveys concerning household food consumption;

(b) regional surveys concerning supplies for markets of local interest;

(c) studies on the supplying of large economic centres (large towns in particular);

(d) lastly, improvements to be made in export statistics (foreign trade) under the following headings:

(d)(1) improvement of current statistics as at present gathered;

(d)(2) introduction of inter-territorial check-points, which would eventually become customs posts;

(e) lastly, estimation of trade in the form of surveys made at check-points on the principal roads.

The first method is obviously closer to actual production.

Moreover there is no danger of counting twice.

On the other hand the second series of studies as a whole offers the advantage of allowing the course of production to be followed, its evaluation emerging in fact only as a by-product.

In any case, all these studies are essential.. What has already been accomplished must be used, even if not perfect. As for the rest, it must be planned (according to the means available) over a fairly long period, even if only a rough draft plan can be prepared for a "start", which will become more specific as further information becomes available.

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PLANNING OF NATIONAL ECONOMY IN THE USSR

by

A. Korobov

State Scientific Economic Council of the USSR

1. In the 45 years of its existence the Soviet Union has acquired great experience in economic planning which is of interest to all countries that may decide now or later to put their economies on a planned basis.

Any enterprise or business be it large or small, public, cooperative or private is managed in accordance with a program drawn up by its collective or individual owner. The objective of management is to achieve specific targets, laid down by the program mentioned above.

It will, however, be remembered that a private business-man's planning is confined to his business and his production plan cannot be stable as it is very sensitive to changes on the market. In Socialist countries it is possible and necessary to extend planning to all aspects of the national economy i.e. to draw up integrated economic plans. The plan of a separate Socialist enterprise is an integral part of the general economic plan.

Fundamental prerequisites for national economic planning are public ownership of the means and instruments of production, the state monopoly of foreign trade and a democratic state system which has the support of the people and pursues a policy aimed at the continuous improvement of the living standards of working people.

2. In the first months after the October Socialist Revolution the Soviet Government did not nationalize all the means of production. Factory owners were not deprived of their property and even continued to manage their factories.

In the same period workers' control was introduced at all major industrial enterprises of the country which had as its objective to ensure uninterrupted functioning of industry. But even this measure was bitterly opposed by the owners who attempted to blackmail the young Republic with lockouts. In this situation the Soviet Government had to start the nationalization of industry. In the first seven months of its existence the Soviet State nationalized 512 enterprises. These steps were followed by a general decree on the nationalization of 2,000 large enterprises adopted on June 28, 1918.

The Supreme Council of National Economy, the first planning agency of the Soviet State controlled in 1918 50 per cent of the national industrial output.

plan, i.e. to provide for such interconnection and correlation of its elements as would ensure the optimum combination of high rates of growth of production, accumulation and consumption. If this optimum combination is to be attained the country must make full use of all its resources: industrial capacity, natural resources, labour force and all available funds.

It stands to reason that it is impossible to develop all branches of economy at an equally rapid rate. At the initial stage of industrialization when the economic resources of the Soviet Union were relatively small, the State had to establish priorities in economic development. Special efforts were then to be taken to meet the requirements of the priority industries for supplies, investment capital and labour. The State had to give priority to the vital targets of the plan, and the government quite correctly resolved that the basic objective of the period was to overcome the economic backwardness of the country. For this reason the first objective of the plans of this period (the First and Second Five Year plans) was to speed up as much as possible the development of industries that were vital for the technological reconstruction of the whole national economy and for stepping up the rate growth of production. The Soviet State could not, at that time, reckon on foreign aid; it was therefore compelled to restrict investment in consumer goods industries, services and housing. As the economic resources of the State grow it becomes possible to dispense with restrictions as regards the development of certain branches of economy. The number of "low priority" fields shrinks with every passing year. For example, in the USSR the annual rate of capital investment in the light and food industries and in agriculture is now higher than the investment rate in a number of heavy industries.

Nevertheless, the principle of priority targets always remains valid. It is a basic principle of planning indispensible for optimum planning of the entire national economy of the country.

Plans for all branches and fields are worked out on the basis of thorough and detailed integrated technological and economic assessments, supplemented by economic and statistical calculations.

Integrated technological and economic assessment of each target of the plan is a vital element of scientific planning.

Economic i.e. cost - benefit estimates, and integrated technological and economic assessments are used to evaluate the requirements of national economy and the population for specific commodities and services. They are also used to evaluate resources available for meeting these requirements. Of special significance in this respect is a streamlined and rational system of norms for expenditure of materials. Thus requirements for capital goods cannot be evaluated without properly calculated norms for the expenditure of raw and other materials, fuel and energy per unit of the finished product. No less important are capacity utilization (efficiency) standards for plant and equipment.

The conditions needed for planning the national economy were secured by the nationalization of heavy industry, of the State Bank which after 14th December, 1917, became the only organism controlling finance and banking, of transport (railways and the merchant fleet) and of foreign trade.

Large-scale planning dated from 1921, when, at the end of the long period of war and civil war the young Soviet Republic started to rebuild its national economy. The State Planning Commission (Gosplan) was set up on 22nd February, 1921.

3. In the first years of the existence of the U.S.S.R., the national economy was being planned while private capitalism and small peasant property still predominated. In 1922-23 the share of private capital in retail trade was 75%. It was, therefore, quite impossible to apply the plan directly to this part of retail trade or to the output of the small peasant farms or to local artisan industry. The Soviet State employed indirect measures of planning through regulation, mainly by the control of prices, the opening of credits and the organization of trade in particular lines.

Under socialism, with the collectivision of the small peasant farms and the socialisation of private enterprise, it became possible to raise the planning of the national economy of the U.S.S.R. to a higher level.

Since 1931, the State Planning Commission has worked out and the Government has adopted State plans for the national economy, covering not only all the branches of production but also all aspects of the cultural life of the country. A smoothly working system has been developed which runs from the individual enterprise to the State Planning Commission.

The role played by the system of planning created in these years in concentrating the energy and efforts of tens of millions of workers in the task of developing the economy of the country can hardly be overestimated.

4. What are the guiding lines along which the plans for the economic development of the U.S.S.R. are worked out?

Before deciding on the essential tasks to be carried out in the plan, the planning organs make a thorough and detailed analysis from all points of view of the level of economic development already achieved of the rate of growth of existing production, and the proportional relationships between each branch of the economy. The laws of development and the relationships of production empirically established in the course of the preceding years tend to give some guidance in working out the preliminary plans for the future. At the same time, the planning organs of the industrial enterprises, the State farms, the planning commissions of local Soviets, the planning commissions of the federated Republics, and the central planning commission make a serious analysis of the possibilities of the further expansion of production with special attention to the better use of available production capacity and the raising of productivity of labour.

All targets of an economic plan are fixed with two basic underlying factors in view. The first is planning of rates of growth and thus of the final levels of development for the period covered by the plan. The second is structural planning i.e. proportional planning. Rates of growth and proportions are interconnected and this interconnection underlies the plan as regards both its qualitative and quantitative objectives. Failure to take due account of this basic feature of the plan may have grave economic repercussions.

The basic task of the planning team is to draw up an optimal economic

To evaluate the requirements of the population for food and consumer goods our planning agencies rely on consumption norms that are defined by means of research and careful calculations.

In a number of instances especially in long-term planning, when it is difficult to determine a specific target by means of "direct calculation" the planning agency analyses statistics for a number of past years and results of selective surveys with a view to bringing out development trends that the plan must take into account. For example, in order to evaluate the effects of the growth of population's incomes on the demand for consumer goods and services the Soviet planning agencies study reports on selective surveys of family budgets of workers, peasants and office workers.

As has been pointed above a draft plan is drawn up simultaneously for all basic aspects and indices. Targets for major industries and fields are singled out. At the same time balance sheets are drawn for the main items of the plan as each target has to be substantiated and co-ordinated with other targets. A paramount principle of our planning is co-ordination of objectives and targets for various branches of economy and all regions of the country. All elements and components of the plan must be correlated and balanced to ensure proportional economic development. To this end our planning agencies use the method of balance sheet planning, which is employed together with integrated technological and economic assessments, economic estimates at all planning levels, at the factory level, at the Union Republic level and at the national level.

Production plans of separate industries are co-ordinated and correlated by means of balance sheets for specific commodities or commodity categories which are usually drawn in terms of physical units. These balance sheets are worked out to ensure proper co-operation between, and co-ordination of associated industries and to make available resources and requirements dovetail. In recent years wide use has been made of the method of comparative qualitative analysis applied to the balance sheets of commodities that can be used for the same purpose (oil, coal and other fuels; metals and plastics; timber and plastics; timber, metal and concretes). This kind of balance sheet planning is useful for establishing priorities in the production of commodities of the same category. To analyze the process of expanded reproduction the planning and policy-making economic agencies draw up integrated financial balance sheets which cover state revenue and its distribution and re-distribution. Within this category of balance sheets we find the financial plan of Socialist economy, the State budget and also the money circulation plan and the bank credit plan.

Labour balance sheets are used to correlate the requirements for labour with its available resources. At the present time, parallel to a general nation-wide labour balance sheet

our planning organs submit balance sheets for separate categories of the national labour force such as a balance sheet of labour reserves available in agricultural cooperatives, a balance sheet of the skilled industrial labour force, a balance sheet covering school leavers and a balance sheet of personnel with higher and secondary vocational education. Regional labour balance sheets for areas, regions and republics facilitate proper distribution and allocation of available labour and correct geographical distribution of new industry. At a time when science and technology are making quick progress national economy needs an ever growing number of trained personnel: technicians, engineers and others. It is, therefore, obvious that training and assignment of this personnel must also be planned and provided for.

Economic planning, branch and regional plans, co-ordination and correlation of targets and objectives based on material financial and labour balance sheets are in the final analysis all aimed at ensuring balanced economic development, the paramount objective of planning. Provisions were also made for balanced economy to develop at a high and stable rate with rapid growth of both accumulation and public consumption. Keeping economic development on balance and meeting the above requirements is undoubtedly a formidable problem which can be tackled only by planners who are people of great perseverance, and have a perfect knowledge of the country's economy and also of planning theory and practice.

What does a balanced economy imply? It implies that in the final analysis there is complete and proper correlation between the requirements of society in a specific period (as laid down by the plan with due consideration for the level of the country's economic development at the time of planning) and the available resources.

Material, financial and labour balanced sheets discussed above are very important for maintaining correct proportions between separate targets of the plan. Such proportions are indispensible if the country is to have a balanced economy. However, there is another factor that is just as important, viz. the principal economic proportions of reproduction. The principal economic proportions of reproduction are provided for in the integrated balance sheet of national economy which basically consists of the following three sections: (1) a balance sheet plan for the production, circulation, distribution and accumulation of the public product; (2) a balance sheet for the national income and its distribution; (3) an integrated balance sheet for labour force and its distribution between industries and fields of human activity.

Soviet planning agencies now have substantial experience in balance sheet planning which has been greatly improved in recent years. Statistical agencies draw up statistical balance sheets for the past year.

The above discussion has covered principal planning methods used in the USSR. It will, however, be remembered

these methods are not an end in themselves. They are employed to put into practice the principle of "optimalization" which is the principle of maximum economic efficiency of planning.

Optimal planning requires that proper and rational correlation be established between accumulation and consumption, between commodity production and circulation, between industry and agriculture and between the growth rate of labour productivity and that of consumption. The growth rate of labour productivity should be higher than that of consumption as the high growth rate of the former facilitates accumulation and expanded reproduction which in turn makes it possible to allocate more commodities for consumption. If the above proportions are to be maintained, industries producing capital goods should develop at a higher rate than consumer goods industries.

Proper proportions between production, consumption and accumulation must ensure not only the achievement of the targets of the current plant but also lay the foundation for expanded reproduction in the period after its completion. This means that by the beginning of this period there should be a certain amount of unfinished work on construction sites that will ensure continuity of the construction program. Labour required for the same period should be trained beforehand, that economy should have at its disposal sufficient deposits of raw materials already prospected and explored and so on.

Optimal planning also requires that all basic qualitative indices of industry and agriculture should be continuously improved; steps should be taken to make better use of plant and equipment, cut costs and raise economic efficiency of production.

Optimal combination of separate elements and targets is thus tested in accordance with several figures of merit which in effect make up one general criterion of economic effectiveness.

Economic planning which is to meet the above requirements is a matter of tremendous complexity. Planning agencies at the national and local level would be unable to cope with this formidable task if they did not have the assistance of many research institutions, industrial design establishments, public organizations and notably the assistance of the trade unions. Long-term plans are thrown open for nationwide discussion which gives the public opportunities to offer criticism and amendments to draft plans. Optimalization of planning involves as a rule elaboration of several drafts of one plan with the best draft selected and approved after careful discussion and analysis. This method of planning is called in the Soviet Union the method of varient approximations. In recent years wide use has been made of mathematic methods for the selection of the optimum draft plan. This work has so far been confined to finding optimal solutions for specific problems.

5. In the post-war period the Soviet State has taken a number of far-reaching measures to improve the entire system of management and planning at the national as well as at the

local level. The tremendous scale of production in all fields of economy, important growth of the number of highly qualified managerial personnel in regions, territories and national republics and also the need to make better use of untapped local reserves and resources have made re-organization of industrial management and planning an urgent task.

In the pre-war period and in the first years after the war the competence of local administration in the sphere of planning was confined to enterprises of local importance, whereas enterprises of national importance were supervised by the ministries in Moscow. Since 1957 the management and planning of industry and construction has been re-organized. Regional organs were set up (Economic Council of Economic Administrative of Regions) that have taken over management of industry and construction. After the management reform the following procedure for drawing national economic plans has been adopted.

The central planning agencies which work with the assistence of Union Republics, Ministries and other national governing bodies outline a limited number of basic targets of the plan. These basic targets are submitted to the central Government for approval and are used by enterprises, economic councils, regional planning commissions and the planning commissions of Union Republics as the basis for their plans.

Enterprises submit their plans to the economic agency to which they are responsible - the regional economic council, the Regional Soviet of Working People's Deputies, or the republican Ministry. These agencies review the plans submitted by the enterprises and draw up integrated plans of economic development in accordance with the targets sent down by the Union Republic. The integrated plans are submitted to the Planning Commission of the Union Republic involved.

The Union Republics and central ministries and agencies of the country submit their plans to the central planning organs - the State Economic Council and the Economic Commission of the USSR. The State Economic Council draws up national long-term economic plans while the State Economic Commission of the USSR is responsible for current planning. Both long-term and current plans are submitted to the Soviet Government for approval. The approval of a plan is the beginning of the most important stage of planning viz. supervision of plan fulfillment. Supervision of the fulfillment of a national plan calls for co-ordinated efforts of all Goverment and Public organizations and agencies, in the fields of economic management, propaganda and research. Planning agencies have a special role to play in this work. They regularly review the progress achieved and evolve measures to correct disproportions and drawbacks, that may be revealed in one field or another.

6. The experience of economic planning in the USSR emphasizes the importance of the closset possible co-ordination of short term current planning (annual and quaterly plan) with long-term planning (five-year plans, seven-year plans or

plans covering longer periods). Failure to bring annual and quaterly plans in line with long-term planning may give rise to discrepancies and or disproportions in the development of some branches of national economy or regions and may have an adverse effect on national economic development.

At the present time the Soviet Government regards the improvement of long-range planning as a matter of vital importance. To translate into reality the gigantic program of economic development mapped out by the new Programm of the CPSU. Soviet economy needs well substantiated and sound long-term plans based on a scientific approach. We live at a time of rapid technological progress. The planning agencies must keep abreast of the latest developments in science and technology and see to it that new scientific and technological achievements are introduced into national economy without delay. They are also called upon to use the system of long-term planning to encourage this work economically through appropriate economic policies and incentives. Long-term plans have the exclusive function of providing for the construction of projects of national importance and outlining long-range objectives of economic development. They are also important for the enterprises already in operation. They can be used with advantage to improve the organization of production at these enterprises and to plan expansion programs and technological progress. Mention must also be made of the growing importance of long-range plans for the international Socialist division of labour, specialization and co-operation within the Socialist camp.

7. An important feature of the present stage of the Soviet Union's economic development is the need for continuity in planning. Under the system of long-range planning that had been used until a few years ago the economy of the country, the economies of national Republics and individual enterprises had a plan for the next five years only at the beginning of this period. After the first year of the period the republic or the enterprises involved could see ahead only for the next four years. By the end of the second, third and fourth year of the plan their "field of vision" shrank to three years, two years and one year respectively. National economy and its fields can effectively develop only on condition that at any time industrial leaders and executives can see many years ahead. This condition can be met if work on the next annual plan will also include assessment of the basic targets of economic development for the year that will come in a five years' time. For example, when in 1961 our planners drew the plan for 1962 they also outlined the basic targets of the plan for 1966. While working in 1962 on the plan for 1963 the planning agencies are also responsible for outlining the basic targets of the 1967 plan. This system of planning makes it possible to draw each annual plan against the background of the plan for the next five years. It also enables the planners to take into account preliminary estimates of the basic annual targets when working on the next five-year plan.

This paper is a very general description of some problems of economic planning in the Soviet Union. Soviet planning in our country is being continuously developed and improved. We do not overestimate our planning theory and practice as in many respects they are not yet what they ought to be. Nevertheless, we are glad to see that each year brings us closer to an optimal system of planning. Thanks to this progress we are able to enhance each year the effectiveness of the Soviet Union's productive forces

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SUMMARY

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USSR

PLANNING IN NATIONAL ECONOMY OF THE USSR

By A. KOROBOV,
State Scientific Economic
Council of the USSR

Papers have been contributed to the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas as working papers for that Conference. They are published as presented by the contributors, and the contents and the views expressed are those of the contributors. (See notes overleaf.)

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PLANNING IN NATIONAL ECONOMY OF THE USSR

by

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the USSR

SUMMARY

1. In the 45 years of its existence the Soviet Union has acquired great experience in economic planning which is of interest to all countries that may decide now or later to put their economies on a planned basis.

Fundamental prerequisites for national economic planning are public ownership of the means and instruments of production, the state monopoly of foreign trade and a democratic state system which has the support of the people and pursues a policy aimed at continuous improvement of the living standards of working people.

2. Immediately after the October Socialist Revolution of 1917 the country began to develop a system of planning. This development was stimulated by the growth of the factors mentioned above.

The Supreme Council of National Economy, the first planning agency of the Soviet State controlled in 1918 50 per cent of the national industrial output.

Nationalized large enterprises, the State Bank which after December 1917 monopolized all banking credit and currency control in the country, nationalized foreign trade, nationalized transport (railroads and merchant marine) were important prerequisites for introducing the beginnings of planning at that early stage.

3. In the first years of the Soviet State Economic planning was carried out at a time when private capital was still strong in a number of fields and when small scale peasant farming was predominant in the country's agriculture.

With the victory of Socialism which was won after the collectivization of small peasant farms and complete abolition of private ownership in industry economic planning in the USSR advanced to a higher stage.

The basic task of the planning agencies is to draw up an optimal economic plan that is to provide for such interconnection and correlation of its elements as would ensure optimum combination of high growth rates of production, accumulation and consumption. If this optimum combination is to be attained the country must make full use of all its resources: the industrial force, natural resour-

ces, the labour force and all available funds.

A draft plan is drawn up simultaneously for all basic objectives and indices. Targets for major industries and fields are singled out. At the same time targets are outlined for so-called principal aspects of the plan as each target or index has to be substantiated and coordinated with others. To this end our planning agencies use the method of balance sheet planning which is employed together with the method of integral technological and economic assessment at all levels that is at the factory, at the Union Republic level and at the national level.

Production plans are co-ordinated and correlated by means of balance sheets for specific commodities or commodity categories: balance sheets for production capacity, for commodity reserves, labour and also national financial balance sheets (financial plan, money income and expenditure balance sheet for the population) and finally an integrated national income/economic development balance sheet.

5. In the post-war period the Soviet State has taken a number of far-reaching measures to improve the entire system of management and planning at the national as well as well as at the local level. The tremendous scale of production in all fields of economy, significant growth of the number of highly qualified managerial personnel in regions, territories and national republics and also the need to make better use of untapped local reserves and resources have made re-organization of industrial management and planning an urgent task.

6. The experience of economic planning in the USSR emphasizes the importance of the closest possible co-ordination of short term current planning (annual and quaterly plans) with long-term planning (five-year plans, seven-year plans or plans covering longer periods). Failure to bring annual and quaterly plans in line with long-term planning may give rise to discrepancies and/or disproportions in some branches of national economy. At the present time the Soviet Government regards the improvement of long-range planning as a matter of vital importance.

7. An important feature of the present stage of the Soviet Union's economic development is the need for continuity in planning. National economy and its fields must always have long-range development plans. National economy and its fields can effectively develop only on condition that at any time industrial leaders can see many years ahead. This condition can be met if work on the next annual plan also includes assessment of the basic targets of economic development for the year that will come in a five years' time. For example, when in 1961 our planners drew the plan for 1962 they also outlined the basic targets of the plan for 1966. While working in 1962 on the plan for 1963 the planning agencies are also responsible for outlining the basic targets of the 1967 plan. This system of planning makes it possible to draw annual plans against the background of the next five years and also take into account preliminary estimates for the final year of the five-year period when starting work on its plan.

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Agenda Item : H

Ukrainian SSR

STATE SECTOR AND INDUSTRIALISATION PRIORITIES IN DEVELOPING COUNTRIES

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STATE SECTOR AND INDUSTRIALISATION PRIORITIES IN DEVELOPING COUNTRIES

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Industrialisation is an indispensable condition for economic upsurge, growth of employment and living standard of the population. This is the basic conclusion from the analysis of the history of all major industrial areas of the world existing now, i.e., the bulk of European states, the USA and Japan.

Industrialisation process started in Britain, and only in the second half of the nineteenth century and the beginning of the twentieth century it extended to a limited number of other states. Everywhere its beginning was marked by a growth of the light industry. As to the heavy industry, its development varied particularly with respect to the selection of certain branches of mechanical engineering. Comparison of industrial development of Britain and Germany, for instance, clearly shows that priority in the selection of projects is determined by specific historical conditions.

Apart from being a protracted process and extending to very few countries, industrialisation was mainly effected (financed) by exploiting the overwhelming majority of world nations, hampering and distorting their economy.

Economic development of the USSR and other countries making up the world socialist system follows a different path (as regards both the financing methods and the selection of industrial projects) and yields other results bringing about, not agrarisation but industrialisation of economically underdeveloped regions and countries. If private enterprise and spontaneous market conditions resulted in development of modern industry in some limited parts of the globe, socialism ✓ creates the necessary prerequisites for its comprehensive development everywhere.

Life has shattered the myth that industrialisation is the lot of outstanding countries. It has been proved that industrialisation of some countries can stimulate the development of modern industry in others. Thus, new regularities of economic development in a number of industrial areas of the world made possible the industrialisation of economically underdeveloped countries. Besides, the present level of development of industry and technique entails a different approach to selection of primary projects as the countries lagging behind in their development can make use of the latest achievements of science and technology and draw on the experience of others so as to increase their rate of development.

Economic independence is the primary task of young states. To accomplish this job they must put an end to the agrarian (raw-material) nature of their monoculture economy and build up a national economy. The latter implies a versatile modern economic structure with the bulk of enterprises belonging to the state or its citizens. Building of a sound national economy in the long run is inconceivable without the development of industry. The young states differ appreciably in their levels of economic development, availability of material resources, their areas and population, time of achieving independence and some other factors (compare, for example, India with Central African states). It does not mean, however, that industrialisation is unnecessary or altogether impossible in the majority of these countries. But these differences necessitate a careful and specific study of probable ways and phases of paving the way for industrialisation, its orientation and scope in different groups of these states. In each specific case preference should be given to projects which, at the particular stage, lead to a versatile economy making for the division of labour and increase in the productivity of aggregate national labour.

This general principle explaines why different countries with the diverse conditions should accomplish different projects on their way to the common goal, i.e. industrialisation. For some time they may lay emphasis on organisation (or improvement) of a transport system, or power engineering, the light of the mining industry or individual branches of agriculture, etc. But it is in the national interests that these projects should be regarded as a preparatory step to economic development or as a component of industrialisation but not as an end in themselves. This very aspect determines the priority and scope of the projects.

It is quite obvious that new states face great difficulties in their economic development, especially in finance and capital formation, because a backward economy implies low rates of accumulation. This still more emphasisss the problem of priority, i.e. the selection of the most effective way of putting on end to economic backwardness and creating a developed national economy.

The particular importance and diversity of the priority problem under specific conditions of young countries requires a special effective means to attain its practical solution. The state sector is considerably superior as regards mobilization of internal resources and increase of accumulation sources (especially by expanding of state enterprise in trade and banking) Functioning state-owned enterprises are an important source of accumulation. And this source acquires a greater importance with the increase in the number of state-owned enterprises. As to external sources of capital, the state sector can obtain them on much easier terms and make a fuller use of them, though there are some difficulties here too.

Furthermore, the state sector can not only better concentrate the limited and scattered finances, but also utilize them for the development of those branches of national economy that the country needs urgently.

The state sector is a reliable means of proper selection of industrial projects and an efficient lever for the accomplishment of first-priority projects and consolidation of the achievements.

The state sector not only enables overcoming financial difficulties. No less important is its role in solving the problem of obtaining material elements of capital. It is the state sector that can determine the optimum ratio between the import of necessary foreign products and the maximum utilization of products in new construction, and thus to stimulate the maximum expansion of home industry.

Probably the most difficult and important task in building up a national economy is acquiring new professional skills and knowledge by the workers and training national engineers and technicians. This task has obvious priority over many others, since without accomplishing it no programs of economic revival can be carried out. Only the state is in a position to train industrial personnel and set up a network of research institutes and laboratories on a sufficiently large scale.

Many countries who entered upon a path of independent development need, for attaining economic integrity and upsurge, a modern traffic system (including shipping). The same is true for the power industry, etc, The role of the state sector is not argued by anybody, though the infra-structure, its scope, and, what is most important, its trends are the subject of heated discussions.

At present industrial progress of new states does not necessarily imply building up all branches of heavy industry in the majority of these countries. There arises the problem of proper division of labour among the new states themselves, aimed at their general upsurge, financial savings, some regional industrialisation at the given stage on the basis of equality of all the participants and with the assistance of economically advanced countries.

In the long run priority of industrial projects amounts to establishing the required and practicable, at a definite specific point, relation between "A" and "B" production groups (production of means of production and production of consumer goods, respectively). But only the state sector is capable of establishing such a ratio effectively and quickly and, what is most important carry into life projects that are vital for revival of the entire national economy and which cannot be implemented by private enterprise due to lack of capital or low profits from the "business".

As a rule, the basic programs of economic construction are of an integral nature. The Asswan Dam project in the United Arab Republic, for example, will simultaneously solve a great number of problems of agriculture, power and industry. Naturally, such projects can be implemented only by the state.

Finally, the needs of economic development in young states gave rise to a substantially new phenomenon, namely, more or less comprehensive long-term plans of economic development.

The past experience in solving problems of priority during the first years of independent development of young states of Africa and Asia has shown that they are solved most successfully where there is a considerable and growing state sector, that

priority should be based on the principle of a maximum rise of productivity of aggregate national labour growth of employment and the living standard possible for the country in a given period. All this cannot be accomplished without a vigorous economic upsurge since otherwise no economic independence can be conceived.

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Agenda Item : H

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SUMMARY

Economic independence is the primary task of young states which is indissolubly tied with putting an end to the agrarian and monoculture nature of their economy, with building up the basic elements of the national economy. The latter implies a versatile modern economic structure with the major part of enterprises belong to the State or its citizens. Building up of a sound national economy in the long run is feasible without development of industry. The young States differ appreciably in their levels of economic development, availability of material resources, their areas and population, time of achieving independence and some other factors. This does not mean, however, that industrialisation in the majority of these countries is unnecessary or impossible. But these differences necessitate a thorough and specific study of probable ways and phases of preparation for industrialisation and the likely orientation and scope of its development in different groups of these states. In each case preference is given to projects which, at a given stage, most effectively lead the country to the creation of a versatile structure making for the division of labour, and promote increase in the productivity of aggregate national labour.

The state sector is a reliable means of proper selection of industrial projects and a lever aiding in the accomplishment of first-priority projects and consolidation of the successes achieved. It can more effectively overcome financial difficulties, establish the best combination of imports of necessary materials and the maximum utilisation of national products in new construction, conduct training of national engineers and technicians and improve professional skills of the workers.

At present economic progress in new States does not necessarily imply building up all branches of heavy industry in individual countries. There arises the problem of labour division among the developing countries themselves aimed at the general development of financial savings, the carrying out at a given stage of some regional industrialisation on the basis of equality of all participants and with the assistance of economically advanced countries.

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